



SEQUENCE LISTING

<10> Hauptmann, Rudolph
Himmeler, Adolph
Maurer-Fogy, Ingrid
Stratowa, Christian

<120> TNF Receptors, TNF Binding Proteins and DNAs Coding for Them

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<170> PatentIn Ver. 2.0

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<223> Portion of TNF-BP pro protein cleaved by extracellular proteases following secretion.

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aatgggcgag tgagaggcca tagctgtctg gc atg ggc ctc tcc acc gtg cct 233
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				245					250					255	
Gly	Glu	Leu	Glu	Gly	Thr	Thr	Thr	Lys	Pro	Leu	Ala	Pro	Asn	Pro	Ser
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275		280		285
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290		295		300
Pro Asn Phe Ala Ala Pro Arg Arg Glu Val Ala Pro Pro Tyr Gln Gly				
305		310		315 320
Ala Asp Pro Ile Leu Ala Thr Ala Leu Ala Ser Asp Pro Ile Pro Asn				
	325		330	335
Pro Leu Gln Lys Trp Glu Asp Ser Ala His Lys Pro Gln Ser Leu Asp				
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Thr Asp Asp Pro Ala Thr Leu Tyr Ala Val Val Glu Asn Val Pro Pro				
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Leu Arg Trp				
370				

<210> 13
 <211> 6414
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: pADCMV1 vector

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<220>
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 caacgacccc cgccattga cgtcaataat gacgtatgtt cccatagtaa cgccaatagg 180
 gactttccat tgacgtcaat ggggtggagta ttacggtaa actgccact tggcagtaca 240

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<210> 14
 <211> 2173
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> CDS
 <222> (245)..(1630)

<220>
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 ttgccaattg ctgccctgtc cccagcccca atgggggagt gagagaggcc actgccggcc 240

ggac atg ggt ctc ccc atc gtg cct ggc ctg ctg ctg tca ctg gtg ctc	289
Met Gly Leu Pro Ile Val Pro Gly Leu Leu Leu Ser Leu Val Leu	
1 5 10 15	
ctg gct ctg ctg atg ggg ata cac cca tca ggg gtc acc gga ctg gtt	337
Leu Ala Leu Leu Met Gly Ile His Pro Ser Gly Val Thr Gly Leu Val	
20 25 30	
cct tct ctt ggt gac cgg gag aag agg gat aat ttg tgt ccc cag gga	385
Pro Ser Leu Gly Asp Arg Glu Lys Arg Asp Asn Leu Cys Pro Gln Gly	
35 40 45	
aag tat gcc cat cca aag aat aat tcc atc tgc tgc acc aag tgc cac	433
Lys Tyr Ala His Pro Lys Asn Asn Ser Ile Cys Cys Thr Lys Cys His	
50 55 60	
aaa gga acc tac ttg gtg agt gac tgt cca agc cca ggg cag gaa aca	481
Lys Gly Thr Tyr Leu Val Ser Asp Cys Pro Ser Pro Gly Gln Glu Thr	
65 70 75	
gtc tgc gag ctc tct cat aaa ggc acc ttt aca gct tcg cag aac cac	529
Val Cys Glu Leu Ser His Lys Gly Thr Phe Thr Ala Ser Gln Asn His	
80 85 90 95	
gtc aga cag tgt ctc agt tgc aag aca tgt cgg aaa gaa atg ttc cag	577
Val Arg Gln Cys Leu Ser Cys Lys Thr Cys Arg Lys Glu Met Phe Gln	
100 105 110	
gtg gag att tct cct tgc aaa gct gac atg gac acc gtg tgt ggc tgc	625
Val Glu Ile Ser Pro Cys Lys Ala Asp Met Asp Thr Val Cys Gly Cys	
115 120 125	
aag aag aac caa ttc cag cgc tac ctg agt gag acg cat ttc cag tgt	673
Lys Lys Asn Gln Phe Gln Arg Tyr Leu Ser Glu Thr His Phe Gln Cys	
130 135 140	
gtg gac tgc agc ccc tgc ttc aat ggc acc gtg aca atc ccc tgt aag	721
Val Asp Cys Ser Pro Cys Phe Asn Gly Thr Val Thr Ile Pro Cys Lys	
145 150 155	
gag aaa cag aac acc gtg tgt aac tgc cac gca gga ttc ttt cta agc	769
Glu Lys Gln Asn Thr Val Cys Asn Cys His Ala Gly Phe Phe Leu Ser	
160 165 170 175	
gga aat gag tgc acc cct tgc agc cac tgc aag aaa aat cag gaa tgt	817
Gly Asn Glu Cys Thr Pro Cys Ser His Cys Lys Lys Asn Gln Glu Cys	
180 185 190	
atg aag ctg tgc cta cct cca gtt gca aat gtc aca aac ccc cag gac	865
Met Lys Leu Cys Leu Pro Pro Val Ala Asn Val Thr Asn Pro Gln Asp	
195 200 205	
tca ggt act gcc gtg ctg ttg cct ctg gtt atc ttc cta ggt ctt tgc	913
Ser Gly Thr Ala Val Leu Leu Pro Leu Val Ile Phe Leu Gly Leu Cys	
210 215 220	

ctt tta ttc ttt atc tgc atc agt cta ctg tgc cga tat ccc cag tgg	961
Leu Leu Phe Phe Ile Cys Ile Ser Leu Leu Cys Arg Tyr Pro Gln Trp	
225 230 235	
agg ccc agg gtc tac tcc atc att tgt agg gat tca gct cct gtc aaa	1009
Arg Pro Arg Val Tyr Ser Ile Ile Cys Arg Asp Ser Ala Pro Val Lys	
240 245 250 255	
gag gtg gag ggt gaa gga att gtt act aag ccc cta act cca gcc tct	1057
Glu Val Glu Gly Glu Gly Ile Val Thr Lys Pro Leu Thr Pro Ala Ser	
260 265 270	
atc cca gcc ttc agc ccc aac ccc ggc ttc aac ccc act ctg ggc ttc	1105
Ile Pro Ala Phe Ser Pro Asn Pro Gly Phe Asn Pro Thr Leu Gly Phe	
275 280 285	
agc acc acc cca cgc ttc agt cat cct gtc tcc agt acc ccc atc agc	1153
Ser Thr Thr Pro Arg Phe Ser His Pro Val Ser Ser Thr Pro Ile Ser	
290 295 300	
ccc gtc ttc ggt cct agt aac tgg cac aac ttc gtg cca cct gta aga	1201
Pro Val Phe Gly Pro Ser Asn Trp His Asn Phe Val Pro Pro Val Arg	
305 310 315	
gag gtg gtc cca acc cag ggt gct gac cct ctc ctc tac gga tcc ctc	1249
Glu Val Val Pro Thr Gln Gly Ala Asp Pro Leu Leu Tyr Gly Ser Leu	
320 325 330 335	
aac cct gtg cca atc ccc gcc cct gtt cgg aaa tgg gaa gac gtc gtc	1297
Asn Pro Val Pro Ile Pro Ala Pro Val Arg Lys Trp Glu Asp Val Val	
340 345 350	
gcg gcc cag cca caa cgg ctt gac act gca gac cct gcg atg ctg tat	1345
Ala Ala Gln Pro Gln Arg Leu Asp Thr Ala Asp Pro Ala Met Leu Tyr	
355 360 365	
gct gtg gtg gat ggc gtg cct ccg aca cgc tgg aag gag ttc atg cgg	1393
Ala Val Val Asp Gly Val Pro Pro Thr Arg Trp Lys Glu Phe Met Arg	
370 375 380	
ctc ctg ggg ctg agc gag cac gag atc gag cgg ttg gag ctg cag aac	1441
Leu Leu Gly Leu Ser Glu His Glu Ile Glu Arg Leu Glu Leu Gln Asn	
385 390 395	
ggg cgt tgc ctc cgc gag gct cat tac agc atg ctg gaa gcc tgg cgg	1489
Gly Arg Cys Leu Arg Glu Ala His Tyr Ser Met Leu Glu Ala Trp Arg	
400 405 410 415	
cgc cgc aca ccg cga cac gag gcc acg ctg gac gta gtg ggc cgc gtg	1537
Arg Arg Thr Pro Arg His Glu Ala Thr Leu Asp Val Val Gly Arg Val	
420 425 430	
ctt tgc gac atg aac ctg cgt ggc tgc ctg gag aac atc cgc gag act	1585
Leu Cys Asp Met Asn Leu Arg Gly Cys Leu Glu Asn Ile Arg Glu Thr	
435 440 445	
cta gaa agc cct gcc cac tcg tcc acg acc cac ctc ccg cga taa	1630

Leu Glu Ser Pro Ala His Ser Ser Thr Thr His Leu Pro Arg
 450 455 460

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 ttc 2173

<210> 15
 <211> 461
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: raTNF-R8

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 Ser Leu Gly Asp Arg Glu Lys Arg Asp Asn Leu Cys Pro Gln Gly Lys
 35 40 45
 Tyr Ala His Pro Lys Asn Asn Ser Ile Cys Cys Thr Lys Cys His Lys
 50 55 60
 Gly Thr Tyr Leu Val Ser Asp Cys Pro Ser Pro Gly Gln Glu Thr Val
 65 70 75 80
 Cys Glu Leu Ser His Lys Gly Thr Phe Thr Ala Ser Gln Asn His Val
 85 90 95
 Arg Gln Cys Leu Ser Cys Lys Thr Cys Arg Lys Glu Met Phe Gln Val
 100 105 110
 Glu Ile Ser Pro Cys Lys Ala Asp Met Asp Thr Val Cys Gly Cys Lys
 115 120 125

Lys	Asn	Gln	Phe	Gln	Arg	Tyr	Leu	Ser	Glu	Thr	His	Phe	Gln	Cys	Val	130	135	140
Asp	Cys	Ser	Pro	Cys	Phe	Asn	Gly	Thr	Val	Thr	Ile	Pro	Cys	Lys	Glu	145	150	155
Lys	Gln	Asn	Thr	Val	Cys	Asn	Cys	His	Ala	Gly	Phe	Phe	Leu	Ser	Gly	165	170	175
Asn	Glu	Cys	Thr	Pro	Cys	Ser	His	Cys	Lys	Lys	Asn	Gln	Glu	Cys	Met	180	185	190
Lys	Leu	Cys	Leu	Pro	Pro	Val	Ala	Asn	Val	Thr	Asn	Pro	Gln	Asp	Ser	195	200	205
Gly	Thr	Ala	Val	Leu	Leu	Pro	Leu	Val	Ile	Phe	Leu	Gly	Leu	Cys	Leu	210	215	220
Leu	Phe	Phe	Ile	Cys	Ile	Ser	Leu	Leu	Cys	Arg	Tyr	Pro	Gln	Trp	Arg	225	230	235
Pro	Arg	Val	Tyr	Ser	Ile	Ile	Cys	Arg	Asp	Ser	Ala	Pro	Val	Lys	Glu	245	250	255
Val	Glu	Gly	Glu	Gly	Ile	Val	Thr	Lys	Pro	Leu	Thr	Pro	Ala	Ser	Ile	260	265	270
Pro	Ala	Phe	Ser	Pro	Asn	Pro	Gly	Phe	Asn	Pro	Thr	Leu	Gly	Phe	Ser	275	280	285
Thr	Thr	Pro	Arg	Phe	Ser	His	Pro	Val	Ser	Ser	Thr	Pro	Ile	Ser	Pro	290	295	300
Val	Phe	Gly	Pro	Ser	Asn	Trp	His	Asn	Phe	Val	Pro	Pro	Val	Arg	Glu	305	310	315
Val	Val	Pro	Thr	Gln	Gly	Ala	Asp	Pro	Leu	Leu	Tyr	Gly	Ser	Leu	Asn	325	330	335
Pro	Val	Pro	Ile	Pro	Ala	Pro	Val	Arg	Lys	Trp	Glu	Asp	Val	Val	Ala	340	345	350
Ala	Gln	Pro	Gln	Arg	Leu	Asp	Thr	Ala	Asp	Pro	Ala	Met	Leu	Tyr	Ala	355	360	365
Val	Val	Asp	Gly	Val	Pro	Pro	Thr	Arg	Trp	Lys	Glu	Phe	Met	Arg	Leu	370	375	380
Leu	Gly	Leu	Ser	Glu	His	Glu	Ile	Glu	Arg	Leu	Glu	Leu	Gln	Asn	Gly	385	390	395
Arg	Cys	Leu	Arg	Glu	Ala	His	Tyr	Ser	Met	Leu	Glu	Ala	Trp	Arg	Arg	405	410	415
Arg	Thr	Pro	Arg	His	Glu	Ala	Thr	Leu	Asp	Val	Val	Gly	Arg	Val	Leu	420	425	430

Cys Asp Met Asn Leu Arg Gly Cys Leu Glu Asn Ile Arg Glu Thr Leu
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Glu Ser Pro Ala His Ser Ser Thr Thr His Leu Pro Arg
 450 455 460

<210> 16
 <211> 2141
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> CDS
 <222> (213)..(1580)

<220>
 <223> Description of Artificial Sequence: human TNF-R in
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 ctggacagac cgagtcccgg gaagccccag cactgccgct gccacactgc cctgagccca 180
 katgggggag tgagaggcca tagctgtctg gc atg ggc ctc tcc acc gtg cct 233
 Met Gly Leu Ser Thr Val Pro
 1 5
 gac ctg ctg ctg cca ctg gtg ctc ctg gag ctg ttg gtg gga ata tac 281
 Asp Leu Leu Leu Pro Leu Val Leu Leu Glu Leu Leu Val Gly Ile Tyr
 10 15 20
 ccc tca ggg gtt att gga ctg gtc cct cac cta ggg gac agg gag aag 329
 Pro Ser Gly Val Ile Gly Leu Val Pro His Leu Gly Asp Arg Glu Lys
 25 30 35
 aga gat agt gtg tgt ccc caa gga aaa tat atc cac cct caa aat aat 377
 Arg Asp Ser Val Cys Pro Gln Gly Lys Tyr Ile His Pro Gln Asn Asn
 40 45 50 55
 tcg att tgc tgt acc aag tgc cac aaa gga acc tac ttg tac aat gac 425
 Ser Ile Cys Cys Thr Lys Cys His Lys Gly Thr Tyr Leu Tyr Asn Asp
 60 65 70
 tgt cca ggc ccg ggg cag gat acg gac tgc agg gag tgt gag agc ggc 473
 Cys Pro Gly Pro Gly Gln Asp Thr Asp Cys Arg Glu Cys Glu Ser Gly
 75 80 85
 tcc ttc acc gct tca gaa aac cac ctc aga cac tgc ctc agc tgc tcc 521
 Ser Phe Thr Ala Ser Glu Asn His Leu Arg His Cys Leu Ser Cys Ser
 90 95 100
 aaa tgc cga aag gaa atg ggt cag gtg gag atc tct tct tgc aca gtg 569
 Lys Cys Arg Lys Glu Met Gly Gln Val Glu Ile Ser Ser Cys Thr Val

105	110	115	
gac cgg gac acc gtg tgt ggc tgc agg aag aac cag tac cgg cat tat	617		
Asp Arg Asp Thr Val Cys Gly Cys Arg Lys Asn Gln Tyr Arg His Tyr			
120 125 130 135			
tgg agt gaa aac ctt ttc cag tgc ttc aat tgc agc ctc tgc ctc aat	665		
Trp Ser Glu Asn Leu Phe Gln Cys Phe Asn Cys Ser Leu Cys Leu Asn			
140 145 150			
ggg acc gtg cac ctc tcc tgc cag gag aaa cag aac acc gtg tgc acc	713		
Gly Thr Val His Leu Ser Cys Gln Glu Lys Gln Asn Thr Val Cys Thr			
155 160 165			
tgc cat gca ggt ttc ttt cta aga gaa aac gag tgt gtc tcc tgt agt	761		
Cys His Ala Gly Phe Phe Leu Arg Glu Asn Glu Cys Val Ser Cys Ser			
170 175 180			
aac tgt aag aaa agc ctg gag tgc acg aag ttg tgc cta ccc cag att	809		
Asn Cys Lys Lys Ser Leu Glu Cys Thr Lys Leu Cys Leu Pro Gln Ile			
185 190 195			
gag aat gtt aag ggc act gag gac tca ggc acc aca gtg ctg ttg ccc	857		
Glu Asn Val Lys Gly Thr Glu Asp Ser Gly Thr Thr Val Leu Leu Pro			
200 205 210 215			
ctg gtc att ttc ttt ggt ctt tgc ctt tta tcc ctc ctc ttc att ggt	905		
Leu Val Ile Phe Phe Gly Leu Cys Leu Leu Ser Leu Leu Phe Ile Gly			
220 225 230			
tta atg tat cgc tac caa cgg tgg aag tcc aag ctc tac tcc att gtt	953		
Leu Met Tyr Arg Tyr Gln Arg Trp Lys Ser Lys Leu Tyr Ser Ile Val			
235 240 245			
tgt ggg aaa tcg aca cct gaa aaa gag ggg gag ctt gaa gga act act	1001		
Cys Gly Lys Ser Thr Pro Glu Lys Glu Gly Glu Leu Glu Gly Thr Thr			
250 255 260			
act aag ccc ctg gcc cca aac cca agc ttc agt ccc act cca ggc ttc	1049		
Thr Lys Pro Leu Ala Pro Asn Pro Ser Phe Ser Pro Thr Pro Gly Phe			
265 270 275			
acc ccc acc ctg ggc ttc agt ccc gtg ccc agt tcc acc ttc acc tcc	1097		
Thr Pro Thr Leu Gly Phe Ser Pro Val Pro Ser Ser Thr Phe Thr Ser			
280 285 290 295			
agc tcc acc tat acc ccc ggt gac tgt ccc aac ttt gcg gct ccc cgc	1145		
Ser Ser Thr Tyr Thr Pro Gly Asp Cys Pro Asn Phe Ala Ala Pro Arg			
300 305 310			
aga gag gtg gca cca ccc tat cag ggg gct gac ccc atc ctt gcg aca	1193		
Arg Glu Val Ala Pro Pro Tyr Gln Gly Ala Asp Pro Ile Leu Ala Thr			
315 320 325			
gcc ctc gcc tcc gac ccc atc ccc aac ccc ctt cag aag tgg gag gac	1241		
Ala Leu Ala Ser Asp Pro Ile Pro Asn Pro Leu Gln Lys Trp Glu Asp			
330 335 340			

agc gcc cac aag cca cag agc cta gac act gat gac ccc gcg acg ctg 1289
 Ser Ala His Lys Pro Gln Ser Leu Asp Thr Asp Asp Pro Ala Thr Leu
 345 350 355
 tac gcc gtg gtg gag aac gtg ccc ccg ttg cgc tgg aag gaa ttc gtg 1337
 Tyr Ala Val Val Glu Asn Val Pro Pro Leu Arg Trp Lys Glu Phe Val
 360 365 370 375
 cgg cgc cta ggg ctg agc gac cac gag atc gat cgg ctg gag ctg cag 1385
 Arg Arg Leu Gly Leu Ser Asp His Glu Ile Asp Arg Leu Glu Leu Gln
 380 385 390
 aac ggg cgc tgc ctg cgc gag gcg caa tac agc atg ctg gcg acc tgg 1433
 Asn Gly Arg Cys Leu Arg Glu Ala Gln Tyr Ser Met Leu Ala Thr Trp
 395 400 405
 agg cgg cgc acg ccg cgg cgc gag gcc acg ctg gag ctg ctg gga cgc 1481
 Arg Arg Arg Thr Pro Arg Arg Glu Ala Thr Leu Glu Leu Leu Gly Arg
 410 415 420
 gtg ctc cgc gac atg gac ctg ctg gcc tgc ctg gag gac atc gag gag 1529
 Val Leu Arg Asp Met Asp Leu Leu Gly Cys Leu Glu Asp Ile Glu Glu
 425 430 435
 gcg ctt tgc ggc ccc gcc gcc ctc ccg ccc gcg ccc agt ctt ctc aga 1577
 Ala Leu Cys Gly Pro Ala Ala Leu Pro Pro Ala Pro Ser Leu Leu Arg
 440 445 450 455
 tga ggctgcgccc ctgcgggcag ctctaaggac cgtcctgcga gatcgccttc 1630
 caacccccact tttttctgga aaggaggggt cctgcagggg caagcaggag ctagcagccg 1690
 cctacttggt gctaaccct cgatgtacat agcttttctc agctgcctgc gcgccgccga 1750
 cagtcagcgc tgtgcgcgcg gagagaggtg cgccgtgggc tcaagagcct gagtgggtgg 1810
 tttgcgagga tgagggacgc tatgcctcat gccggttttg ggtgtcctca ccagcaaggc 1870
 tgctcggggg cccttggttc gtcctgagc ctttttcaca gtgcataagc agtttttttt 1930
 gtttttgttt tgttttgttt tgtttttaaa tcaatcatgt tacactaata gaaacttggc 1990
 actcctgtgc cctctgcctg gacaagcaca tagcaagctg aactgtccta aggcaggggc 2050
 gagcacggaa caatggggcc ttcagctgga gctgtggact tttgtacata cactaaaatt 2110
 ctgaagttaa aaaaaaaaaa aaaaggaatt c 2141

<210> 17
 <211> 455
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: human TNF-R in
1TNF-R2

<400> 17

Met	Gly	Leu	Ser	Thr	Val	Pro	Asp	Leu	Leu	Leu	Pro	Leu	Val	Leu	Leu	1	5	10	15
Glu	Leu	Leu	Val	Gly	Ile	Tyr	Pro	Ser	Gly	Val	Ile	Gly	Leu	Val	Pro	20	25	30	
His	Leu	Gly	Asp	Arg	Glu	Lys	Arg	Asp	Ser	Val	Cys	Pro	Gln	Gly	Lys	35	40	45	
Tyr	Ile	His	Pro	Gln	Asn	Asn	Ser	Ile	Cys	Cys	Thr	Lys	Cys	His	Lys	50	55	60	
Gly	Thr	Tyr	Leu	Tyr	Asn	Asp	Cys	Pro	Gly	Pro	Gly	Gln	Asp	Thr	Asp	65	70	75	80
Cys	Arg	Glu	Cys	Glu	Ser	Gly	Ser	Phe	Thr	Ala	Ser	Glu	Asn	His	Leu	85	90	95	
Arg	His	Cys	Leu	Ser	Cys	Ser	Lys	Cys	Arg	Lys	Glu	Met	Gly	Gln	Val	100	105	110	
Glu	Ile	Ser	Ser	Cys	Thr	Val	Asp	Arg	Asp	Thr	Val	Cys	Gly	Cys	Arg	115	120	125	
Lys	Asn	Gln	Tyr	Arg	His	Tyr	Trp	Ser	Glu	Asn	Leu	Phe	Gln	Cys	Phe	130	135	140	
Asn	Cys	Ser	Leu	Cys	Leu	Asn	Gly	Thr	Val	His	Leu	Ser	Cys	Gln	Glu	145	150	155	160
Lys	Gln	Asn	Thr	Val	Cys	Thr	Cys	His	Ala	Gly	Phe	Phe	Leu	Arg	Glu	165	170	175	
Asn	Glu	Cys	Val	Ser	Cys	Ser	Asn	Cys	Lys	Lys	Ser	Leu	Glu	Cys	Thr	180	185	190	
Lys	Leu	Cys	Leu	Pro	Gln	Ile	Glu	Asn	Val	Lys	Gly	Thr	Glu	Asp	Ser	195	200	205	
Gly	Thr	Thr	Val	Leu	Leu	Pro	Leu	Val	Ile	Phe	Phe	Gly	Leu	Cys	Leu	210	215	220	
Leu	Ser	Leu	Leu	Phe	Ile	Gly	Leu	Met	Tyr	Arg	Tyr	Gln	Arg	Trp	Lys	225	230	235	240
Ser	Lys	Leu	Tyr	Ser	Ile	Val	Cys	Gly	Lys	Ser	Thr	Pro	Glu	Lys	Glu	245	250	255	
Gly	Glu	Leu	Glu	Gly	Thr	Thr	Thr	Lys	Pro	Leu	Ala	Pro	Asn	Pro	Ser	260	265	270	
Phe	Ser	Pro	Thr	Pro	Gly	Phe	Thr	Pro	Thr	Leu	Gly	Phe	Ser	Pro	Val	275	280	285	

Pro Ser Ser Thr Phe Thr Ser Ser Ser Thr Tyr Thr Pro Gly Asp Cys
 290 295 300
 Pro Asn Phe Ala Ala Pro Arg Arg Glu Val Ala Pro Pro Tyr Gln Gly
 305 310 315 320
 Ala Asp Pro Ile Leu Ala Thr Ala Leu Ala Ser Asp Pro Ile Pro Asn
 325 330 335
 Pro Leu Gln Lys Trp Glu Asp Ser Ala His Lys Pro Gln Ser Leu Asp
 340 345 350
 Thr Asp Asp Pro Ala Thr Leu Tyr Ala Val Val Glu Asn Val Pro Pro
 355 360 365
 Leu Arg Trp Lys Glu Phe Val Arg Arg Leu Gly Leu Ser Asp His Glu
 370 375 380
 Ile Asp Arg Leu Glu Leu Gln Asn Gly Arg Cys Leu Arg Glu Ala Gln
 385 390 395 400
 Tyr Ser Met Leu Ala Thr Trp Arg Arg Arg Thr Pro Arg Arg Glu Ala
 405 410 415
 Thr Leu Glu Leu Leu Gly Arg Val Leu Arg Asp Met Asp Leu Leu Gly
 420 425 430
 Cys Leu Glu Asp Ile Glu Glu Ala Leu Cys Gly Pro Ala Ala Leu Pro
 435 440 445
 Pro Ala Pro Ser Leu Leu Arg
 450 455

<210> 18
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: N-terminal
 amino acid sequence of protein purified from urine
 (main sequence)

<220>
 <221> UNSURE
 <222> (4)
 <223> Identity of "Xaa" could not be determined.

<400> 18
 Asp Ser Val Xaa Pro Gln Gly Lys Tyr Ile His Pro Gln
 1 5 10

<210> 19
 <211> 9

<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: N-terminal
amino acid sequence of protein purified from urine
(sudsidiary sequence)

<220>
<221> UNSURE
<222> (7)
<223> Identity of "Xaa" could not be determined.

<400> 19
Leu Val Pro His Leu Gly Xaa Arg Glu
1 5

<210> 20
<211> 151
<212> DNA
<213> Homo sapiens

<400> 20
caggggaaaa tattcaccct caaataattc gatttgctgt accaagtgcc acaaaggaaa 60
ctacttgtag aatgactgtc caggcccggg gcaggatacg gactgcaggg agtgtgagag 120
cggctccttc acagcctcag aaaacaacaa g 151

<210> 21
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: TNF-BP tryptic
cleavage peptide

<400> 21
Asp Ser Val Cys Pro Gln Gly Lys
1 5

<210> 22
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: TNF-BP tryptic
cleavage peptide

<220>
<221> UNSURE
<222> (1)..(2)

<223> Identity of "Xaa" could not be determined.

<400> 22

Xaa Xaa Leu Ser Cys Ser Lys

1

5

<210> 23

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: TNF-BP tryptic
cleavage peptide

<400> 23

Asp Thr Val Cys Gly Cys Arg

1

5

<210> 24

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: TNF-BP tryptic
cleavage peptide

<400> 24

Glu Asn Glu Cys Val Ser Cys Ser Asn Cys Lys

1

5

10

<210> 25

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: TNF-BP tryptic
cleavage peptide

<400> 25

Glu Asn Glu Cys Val Ser Cys Ser Asn Cys Lys Lys

1

5

10

<210> 26

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: TNF-BP tryptic
cleavage peptide

<220>
<221> UNSURE
<222> (6)
<223> Identity of "Xaa" could not be determined.

<220>
<221> UNSURE
<222> (10)..(12)
<223> Identity of "Xaa" could not be determined.

<400> 26
Tyr Ile His Pro Gln Xaa Asn Ser Ile Xaa Xaa Xaa Lys
1 5 10

<210> 27
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: TNF-BP tryptic
cleavage peptide

<400> 27
Glu Cys Glu Ser Gly Ser Phe Thr Ala Ser Glu Asn Asn Lys
1 5 10

<210> 28
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: TNF-BP tryptic
cleavage peptide

<400> 28
Leu Val Pro His Leu Gly Asp Arg
1 5

<210> 29
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: TNF-BP tryptic
cleavage peptide

<400> 29
Lys Glu Met Gly Gln Val Glu Ile Ser Ser Cys Thr Val Asp Arg
1 5 10 15

<210> 30
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: TNF-BP tryptic
cleavage peptide

<400> 30
Gly Thr Tyr Leu Tyr Asn Asp Cys Pro Gly Pro Gly Gln
1 5 10

<210> 31
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: TNF-BP tryptic
cleavage peptide

<220>
<221> UNSURE
<222> (9)..(11)
<223> Identity of "Xaa" could not be determined.

<400> 31
Glu Met Gly Gln Val Glu Ile Ser Xaa Xaa Xaa Val Asp
1 5 10

<210> 32
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: TNF-BP tryptic
cleavage peptide

<400> 32
Lys Glu Met Gly Gln Val Glu Ile Ser Ser Cys Thr Val Asp Arg Asp
1 5 10 15

Thr Val Cys Gly
20

<210> 33
<211> 19
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: TNF-BP tryptic cleavage peptide

<220>

<221> UNSURE

<222> (6)

<223> Identity of "Xaa" could not be determined.

<220>

<221> UNSURE

<222> (18)

<223> Identity of "Xaa" could not be determined.

<400> 33

Tyr	Ile	His	Pro	Gln	Xaa	Asn	Ser	Ile	Cys	Cys	Thr	Lys	Cys	His	Lys
1				5					10					15	

Gly Xaa Tyr

<210> 34

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: TNF-BP tryptic cleavage peptide

<220>

<221> UNSURE

<222> (16)..(17)

<223> Identity of "Xaa" could not be determined.

<400> 34

Gly	Thr	Tyr	Leu	Tyr	Asn	Asp	Cys	Pro	Gly	Pro	Gly	Gln	Asp	Thr	Xaa
1				5					10					15	

Xaa Arg

<210> 35

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: TNF-BP tryptic cleavage peptide

<400> 35

Leu	Cys	Leu	Pro	Gln	Ile	Glu	Asn
1				5			

<210> 36
 <211> 14
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: TNF-BP tryptic
 cleavage peptide

 <220>
 <221> UNSURE
 <222> (7)
 <223> Identity of "Xaa" could not be determined.

 <400> 36
 Gln Asn Thr Val Cys Thr Xaa His Ala Gly Phe Phe Leu Arg
 1 5 10

 <210> 37
 <211> 14
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: TNF-BP tryptic
 cleavage peptide

 <400> 37
 Ser Leu Glu Cys Thr Lys Leu Cys Leu Pro Gln Ile Glu Asn
 1 5 10

 <210> 38
 <211> 13
 <212> PRT
 <213> Homo sapiens

 <220>
 <223> Description of Artificial Sequence: TNF-BP tryptic
 cleavage peptide

 <400> 38
 Asp Ser Val Cys Pro Gln Gly Lys Tyr Ile His Pro Gln
 1 5 10

 <210> 39
 <211> 7
 <212> PRT
 <213> Homo sapiens

 <220>
 <223> Description of Artificial Sequence: TNF-BP tryptic
 cleavage peptide

 <400> 39

Gln Gly Lys Tyr Ile His Pro
1 5

<210> 40
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Hybridization
probe

<400> 40
caaggtaa atattcatcc 20

<210> 41
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Hybridization
probe

<400> 41
cagggtaagt acatccatcc 20

<210> 42
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Hybridization
probe

<400> 42
caaggtaa atatacatcc 20

<210> 43
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Hybridization
probe

<400> 43
caaggcaa atattcatcc 20

<210> 44

<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Hybridization
probe

<400> 44
cagggcaagt acatccaccc 20

<210> 45
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Hybridization
probe

<400> 45
caaggcaa atatacatcc 20

<210> 46
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Hybridization
probe

<400> 46
caaggaaa atattcatcc 20

<210> 47
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Hybridization
probe

<400> 47
cagggaaagt acatccaccc 20

<210> 48
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Hybridization probe

<400> 48

caaggaaaat atatacatcc

20

<210> 49

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Hybridization probe

<400> 49

caagggaaat atattcatcc

20

<210> 50

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Hybridization probe

<400> 50

caggggaagt acatccaccc

20

<210> 51

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Hybridization probe

<400> 51

caagggaaat atatacatcc

20

<210> 52

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: TNF-BP tryptic cleavage peptide

<400> 52

Glu Cys Gly Ser Gly Ser Phe Thr Ala Ser Glu Asn Asn Lys

1

5

10

<210> 53
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: TNF-BP tryptic
cleavage peptide

<400> 53
Glu Cys Gly Ser Gly Ser Phe Thr Ala Ser Cys Asn Asn Lys
1 5 10

<210> 54
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: TNF-BP tryptic
cleavage peptide

<400> 54
Phe Thr Ala Ser Glu Asn Asn Lys
1 5

<210> 55
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: TNF-BP tryptic
cleavage peptide

<400> 55
Phe Thr Ala Ser Cys Asn Asn Lys
1 5

<210> 56
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Hybridization
probe

<400> 56
aaatgacgga gactcttggt gttcctaggg

30

<210> 57
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Hybridization
probe

<400> 57
aagtggcgta gtcttttggt gttcctaggg 30

<210> 58
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Hybridization
probe

<400> 58
aaatgtcgga gactcttggt gttcctaggg 30

<210> 59
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Hybridization
probe

<400> 59
aaatgacggt cactcttggt gttcctaggg 30

<210> 60
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Hybridization
probe

<400> 60
aagtggcggt ctcttttggt gttcctaggg 30

<210> 61
<211> 30
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Hybridization probe

<400> 61

aaatgtcggg cactcttggt gttcctaggg

30

<210> 62

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Hybridization probe

<400> 62

aaatgacgga gaacattggt gttcctaggg

30

<210> 63

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Hybridization probe

<400> 63

aagtggcgta gtactttggt gttcctaggg

30

<210> 64

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Hybridization probe

<400> 64

aaatgtcggg gaacattggt gttcctaggg

30

<210> 65

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Hybridization probe

<400> 65
aaatgacggt caacattggt gttcctaggg 30

<210> 66
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Hybridization
probe

<400> 66
aagtggcggt ctactttggt gttcctaggg 30

<210> 67
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Hybridization
probe

<400> 67
aaatgtcggt caacattggt gttcctaggg 30

<210> 68
<211> 158
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (1)..(153)

<400> 68
cag ggg aaa tat att cac cct caa aat aat tcg att tgc tgt acc aag 48
Gln Gly Lys Tyr Ile His Pro Gln Asn Asn Ser Ile Cys Cys Thr Lys
1 5 10 15

tgc cac aaa gga acc tac ttg tac aat gac tgt cca ggc ccg ggg cag 96
Cys His Lys Gly Thr Tyr Leu Tyr Asn Asp Cys Pro Gly Pro Gly Gln
20 25 30

gat acg gac tgc agg gag tgt gag agc ggc tcc ttc aca gcc tca gaa 144
Asp Thr Asp Cys Arg Glu Cys Glu Ser Gly Ser Phe Thr Ala Ser Glu
35 40 45

aac aac aag gatcc 158
Asn Asn Lys
50

<210> 69
<211> 51
<212> PRT
<213> Homo sapiens

<400> 69
Gln Gly Lys Tyr Ile His Pro Gln Asn Asn Ser Ile Cys Cys Thr Lys
1 5 10 15
Cys His Lys Gly Thr Tyr Leu Tyr Asn Asp Cys Pro Gly Pro Gly Gln
20 25 30
Asp Thr Asp Cys Arg Glu Cys Glu Ser Gly Ser Phe Thr Ala Ser Glu
35 40 45
Asn Asn Lys
50

<210> 70
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer
EBI-1786

<400> 70
ggaattcagc ctgaatggcg aatggg 26

<210> 71
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer
EBI-1729

<400> 71
cctcgagcgt tgctggcggt tttcc 25

<210> 72
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer
EBI-1733

<400> 72
ggtcgacatt gattattgac tag 23

<210> 73
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer
EBI-1734

<400> 73
ggaattccct aggaatacag cgg

23

<210> 74
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Mutagenesis
primer EBI-1751

<400> 74
gtacttgaac tcgttcctg

19

<210> 75
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Mutagenesis
primer EBI-1857

<400> 75
ggcaagggca gcagccgg

18

<210> 76
<211> 53
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide EBI-1823

<400> 76
agcttctgca ggtcgacatc gatggatcgg tacctcgagc ggccgcgaat tct

53

<210> 77
<211> 54
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide EBI-1829

<400> 77

ctagagaatt cgcggccgct cgaggtaccg gatccatcga tctcgacctg caga 54

<210> 78

<211> 63

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide EBI-1820

<400> 78

agctctagag attcgcggcc gctcgaggta ccgatccat cgatgtcgac ctgcagaagc 60

ttg 63

<210> 79

<211> 64

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
Oligonucleotide EBI-1821

<400> 79

ctagcaagct tctgcaggtc gacatcgatg gatccggtag ctcgagcggc cgcgaattct 60

ctag 64

<210> 80

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer
EBI-1986

<400> 80

caggatccga gtctcaaccc tcaac 25

<210> 81

<211> 43

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer
EBI-1929

<400> 81

gggaattcct tatcaattct caatctgggg taggcacaac ttc

43

<210> 82

<211> 81

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer
EBI-2452

<400> 82

cacagtcgac ttacatttgc ttctgacaca actgtgttca ctagcaacct caaacagaca 60

ccatgggcct ctccaccgtg c

81

<210> 83

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer
EBI-1922

<400> 83

gaggctgcaa ttgaagc

17

<210> 84

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer
EBI-2316

<400> 84

attcgtgcgg cgcctag

17

<210> 85

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer
EBI-2467

17

<400> 85
gtcggtagca ccaagga

<210> 86
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer
EBI-1986

17

<400> 86
gttttccag tcacgac

Pub-B4

<210> 87
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Sequencing
primer EBI-2112

18

<400> 87
gtccaattat gtcacacc